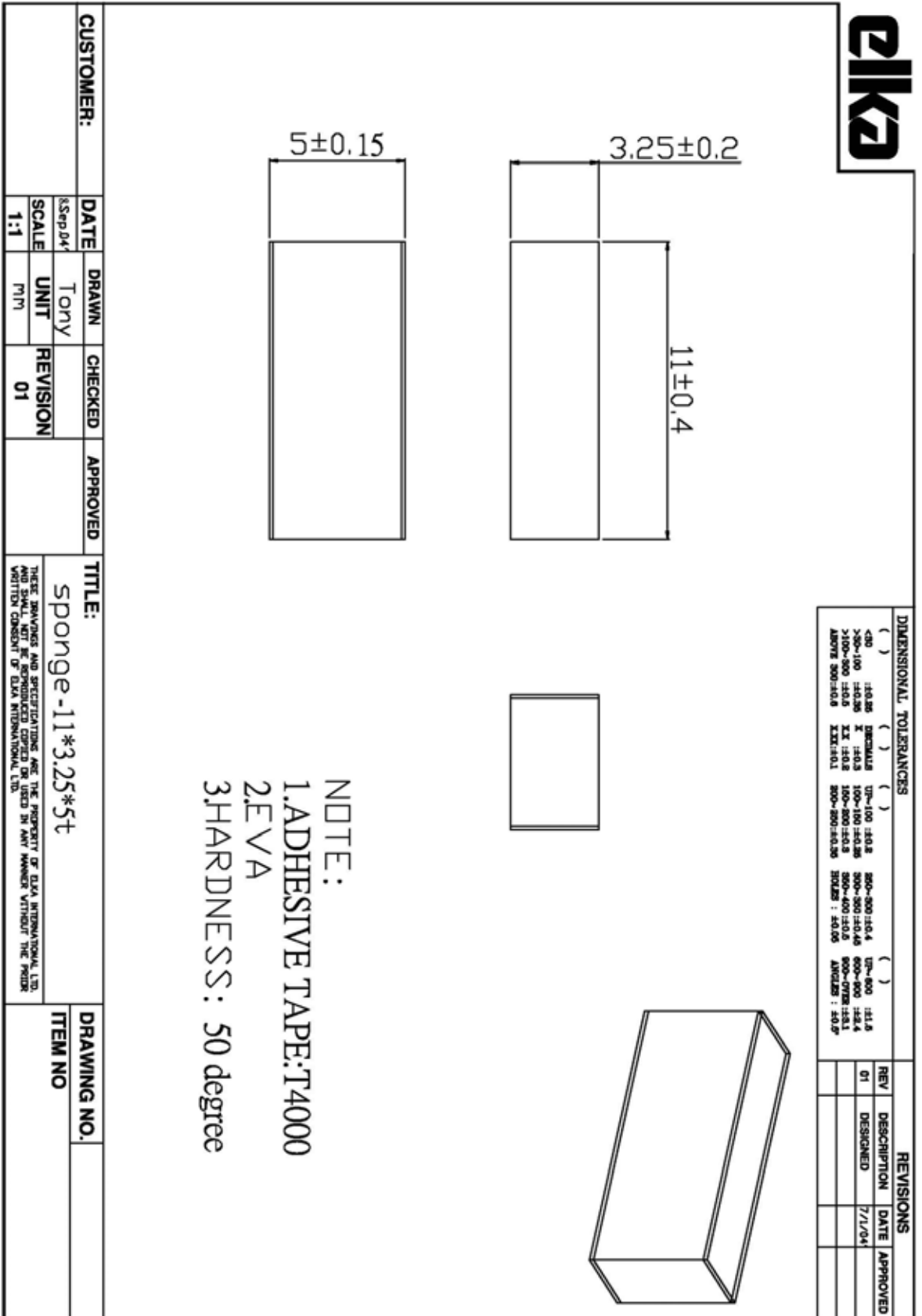


5.2 Sponge



EVA-特性表

EVA:(Ethylene-Vinyl-Acetate)(乙烯醋酸乙烯酯)

EVA 成份:

EVA 物性:

EVA : 30°

EVA:30°~35°

PE :45%

密度:0.588g/cm<sup>3</sup>

架橋劑:3%

延伸率:280%

CaCO<sub>3</sub>:15%

抗拉強度:5kg/cm<sup>2</sup>

發泡劑:7%

吸水率:0.005 以下 g/cm<sup>2</sup>

壓縮變型率:4.5%以下

特 性:耐溫-65°開始軟化,90°將開始熔縮.

特性功用:

1.耐甲苯,酸鹼,易裁加工,彈性佳.

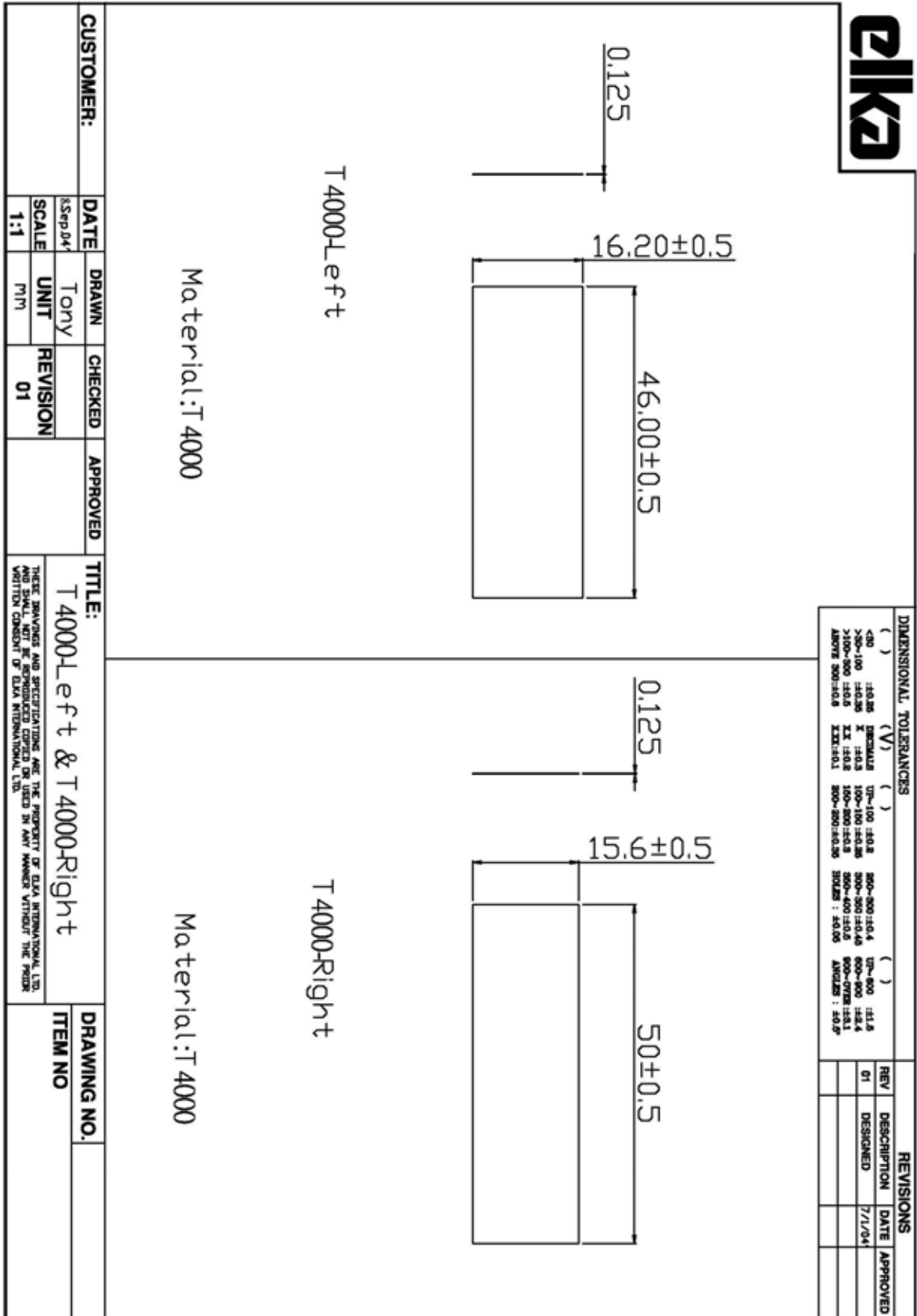
2.常用於運動器材,護具(緩衝材料)  
膠帶,電子墊片.

3.車燈迫緊.

壓縮變型 2%(3kg 在 1H,恢復 60%)

如加膠,特性越好

5.3 Bond Film T4000



**SONY**

# Sony Bond Film T4000

## Sony Bond Film T4000

### Double-Faced Adhesive Tape

T4000 is a double-faced adhesive tape developed for the requirement of strong and permanent bonding. It is a highly selected double-faced adhesive tape with outstanding reliability, having high low-temperature adhesion.

#### SPECIFICATIONS

Coating amount (g/m <sup>2</sup> )	140-170
Coating thickness (mm)	approx. 0.15
Thickness of release paper (mm)	approx. 0.14

#### FEATURES

- Excellent in thermal holding strength
- Excellent in low-temperature adhesion
- High bonding strength in the widest temperature range
- No smell
- Outstanding reliability and durability

#### APPLICATION

T4000 is most suitable for the adhesion to surface decorative sheet, rating plate and escutcheon, etc. made of metal and plastic material for the automobiles and household electric appliances.

T4000 is also recommendable for use as a double-faced permanent adhesive tape for various substrates.

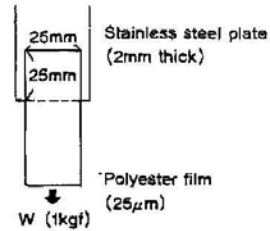
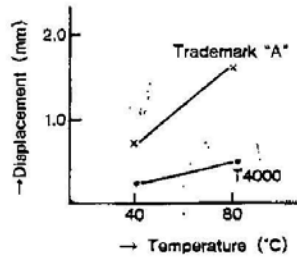
**Sony Chemicals Corporation**

**Sony  
Bond Film  
T4000**

**CHARACTERISTICS**

**1. Holding strength at elevated temperatures**

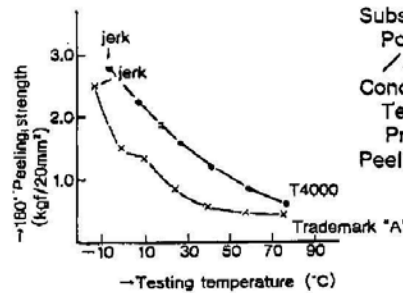
T4000 demonstrates an excellent holding strength even under severe conditions.



Conditions for preparing test pieces  
 Temperature : 20°C  
 Pressure : 2kgf/cm<sup>2</sup> (one stroke)  
 Conditions for test peeling  
 60minutes ; 1kgf of loading

**2. Temperature change of 180° peeling strength**

T4000 provides a high bonding strength at various temperatures



Substrate :  
 Polyester film (25µm)  
 / stainless steel plate (2mm thick)  
 Conditions for preparing test pieces  
 Temperature : 20°C  
 Pressure : 2kgf/cm<sup>2</sup> (one stroke)  
 Peeling speed : 300mm/min.

**3. Peeling strength after aging**

T4000 has excellent thermal aging resistance, and high resistances to moisture, water, oil and weather.

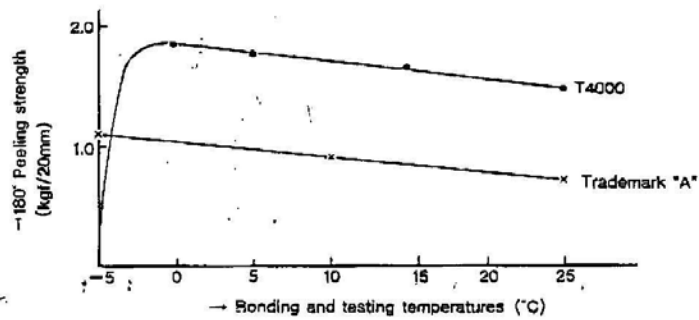
Substrate : Polyester film (25µm)/stainless steel plate (2mm thick)  
 Conditions for preparing test pieces :  
 Temperature : 20°C  
 Pressure : 2kgf/cm<sup>2</sup> (one stroke)  
 Test peeling speed : 300m/min.

**Sony  
Bond Film  
T4000**

**WORKABILITY**

**Low-temperature adhesion**

T4000 provides high adhesion even in the bonding work at low temperatures.



**CAUTION:** While this report is based on our company's reliable testing, this does not imply that the effects noted herein are guaranteed. The user is requested to use this product at his own risk after thorough study of the purposes for which the product is designed and the conditions under which it is used.

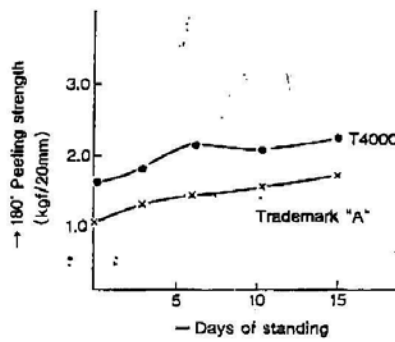
T02002 L (0001/02)

**Sony Chemicals Corporation**

6-3, Nihombashi-Muromachi 1-chome, Chuo-ku, Tokyo, 103 Japan  
Telephone : (03)279-0441  
Telex No : 222-4397 SONY CH  
Fax : (03)246-1784

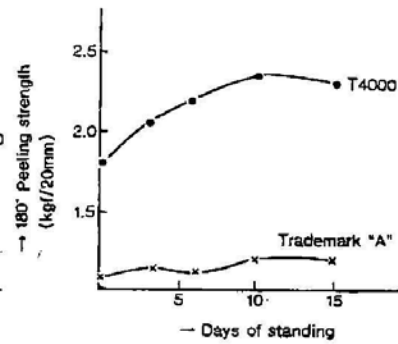
● **THERMAL AGING**

Standing test in the atmosphere



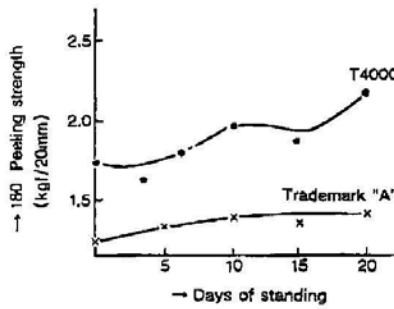
● **MOISTURE RESISTANCE**

Standing test in the atmosphere of 50°C and relative humidity of 90 %



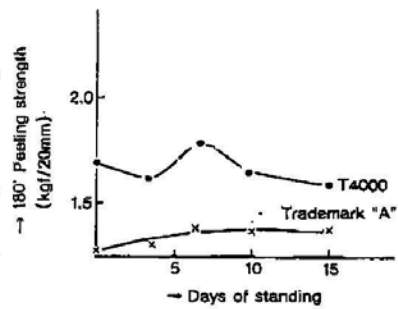
● **WATER RESISTANCE**

standing test in water at 40°C

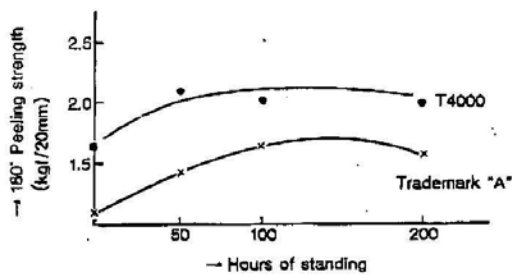


● **OIL RESISTANCE**

Standing test in machine oil at 40°C



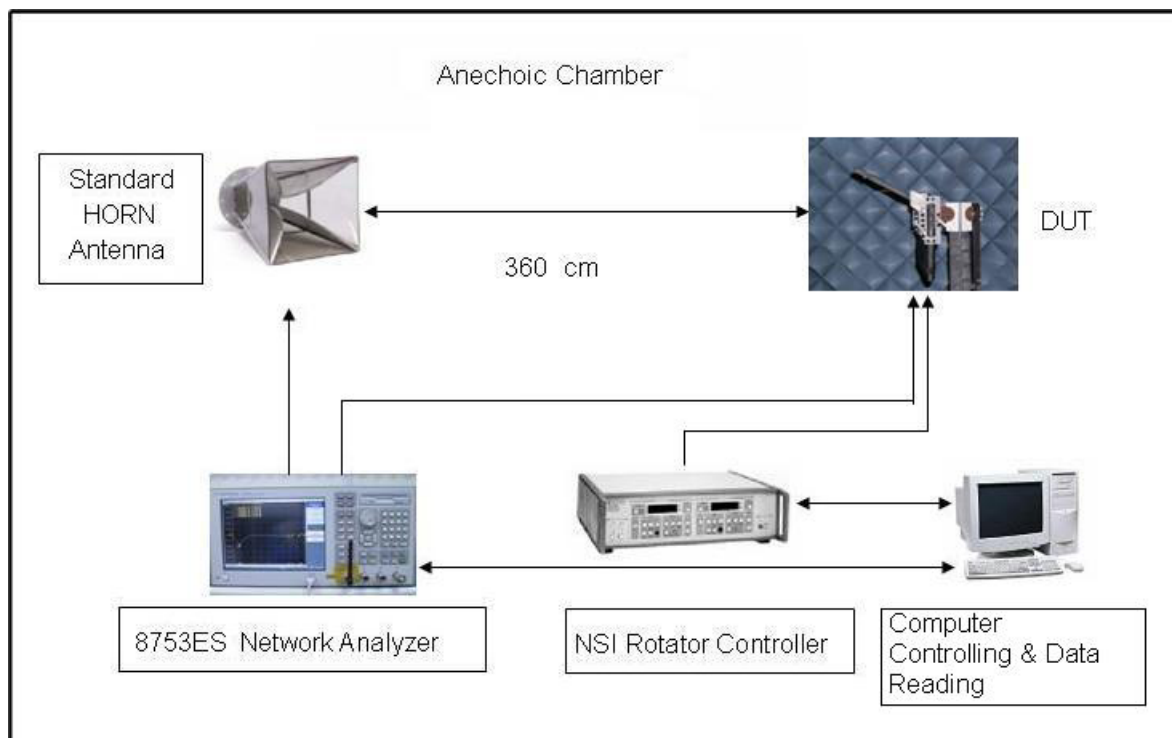
● **WEATHERING**



## 6. ANTENNA TEST INSTRUMENTS

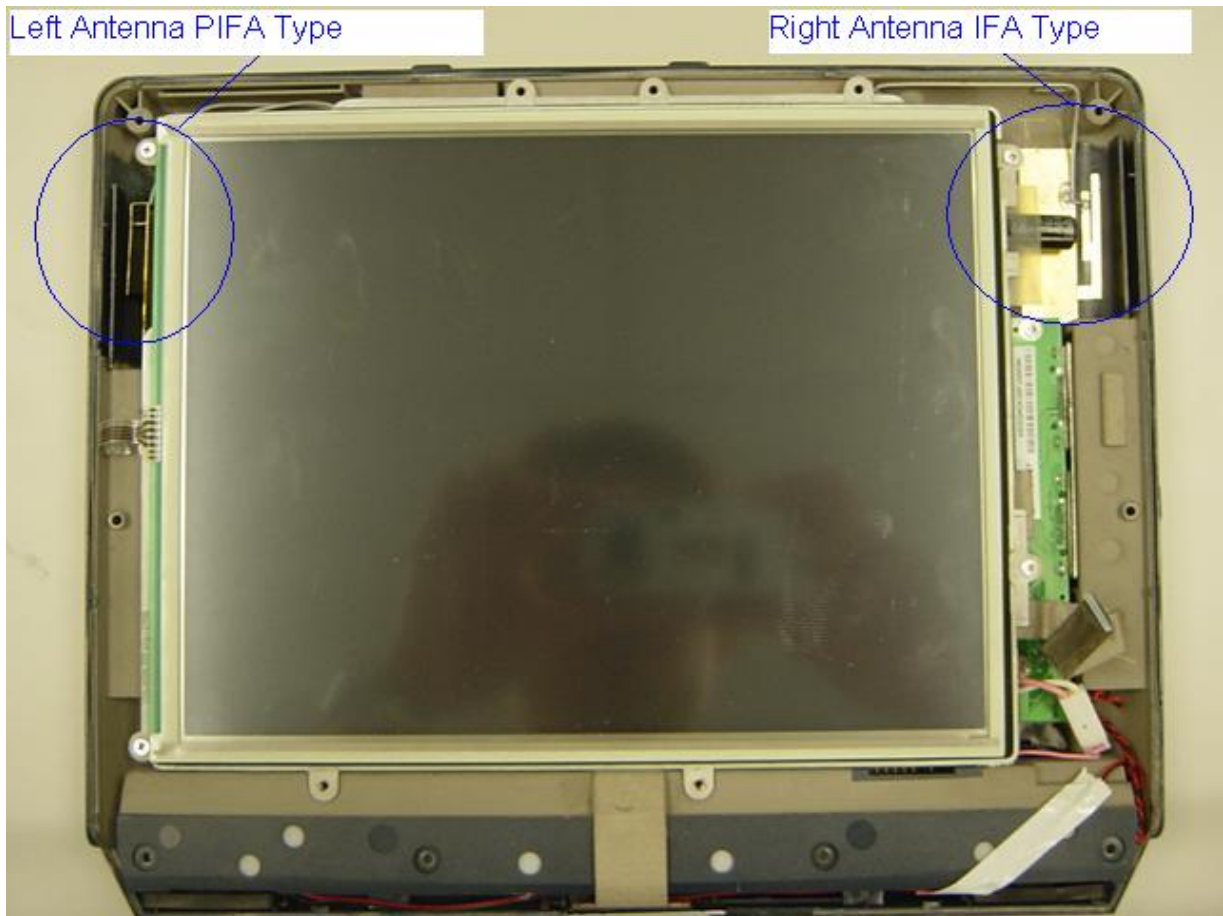
Far-Field Antenna Measurement system –  
WavePro model no. FFC-600T, Anechoic Chamber

Test setup :





**Web Pad Setup**



**DUT Attitude :**

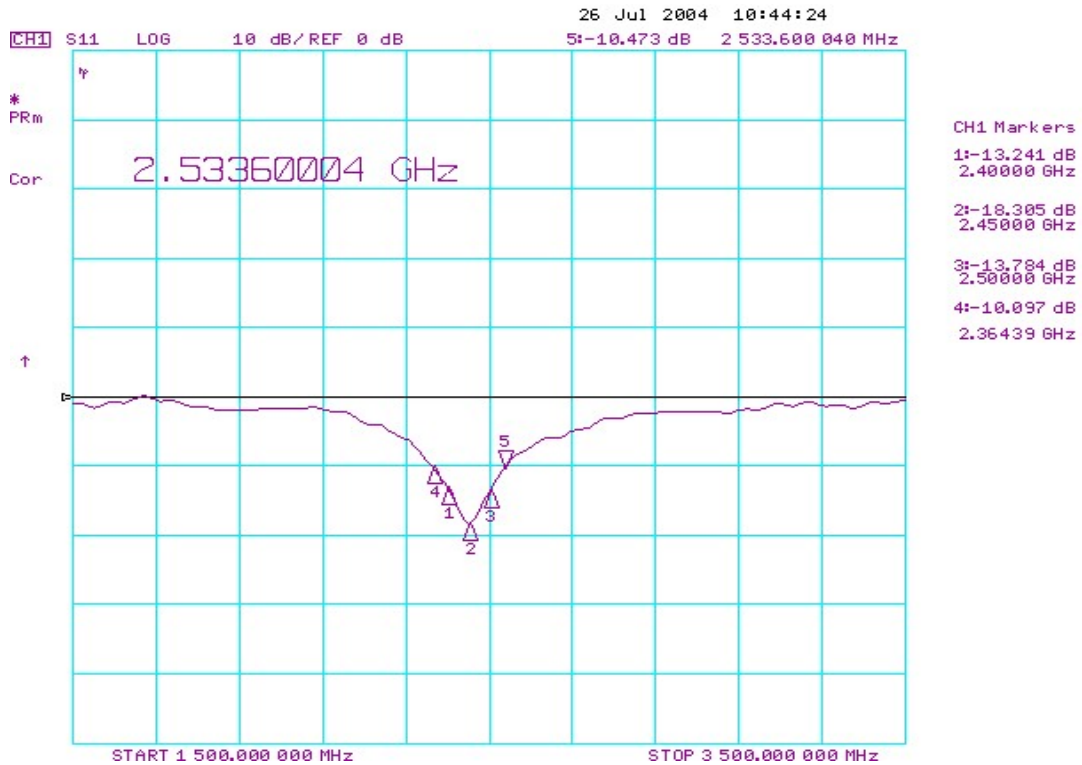
**Flat Case**

**Tilt Case**

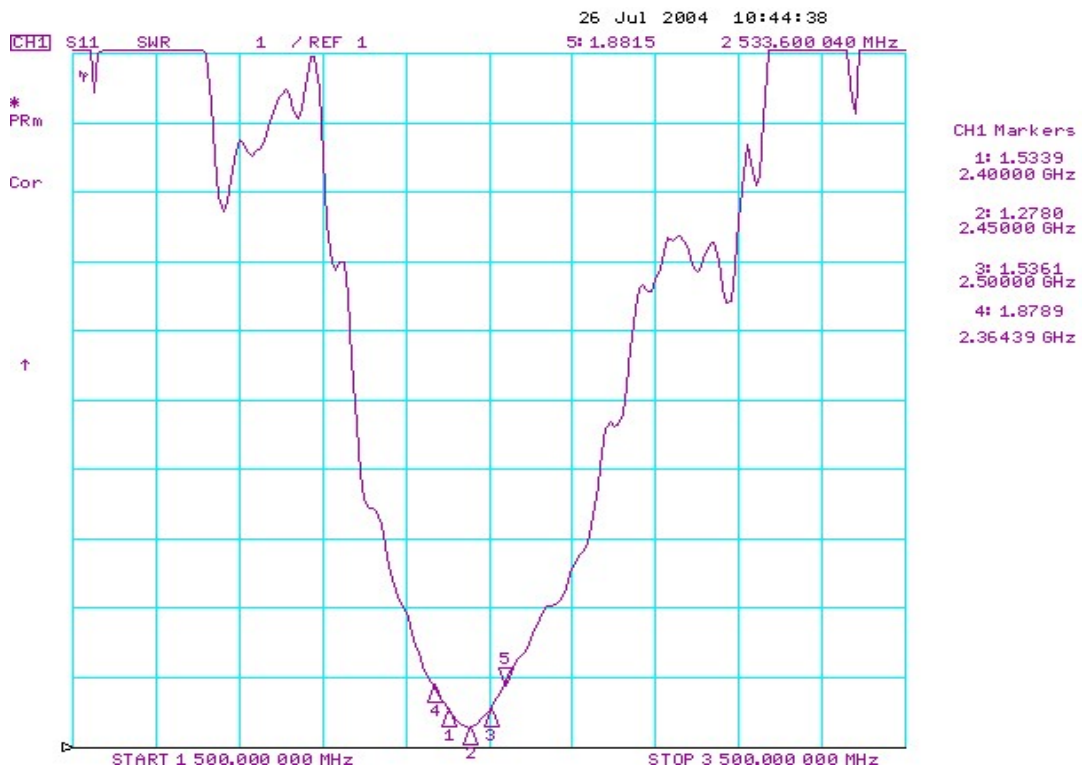


## 7. Electrical performance Test

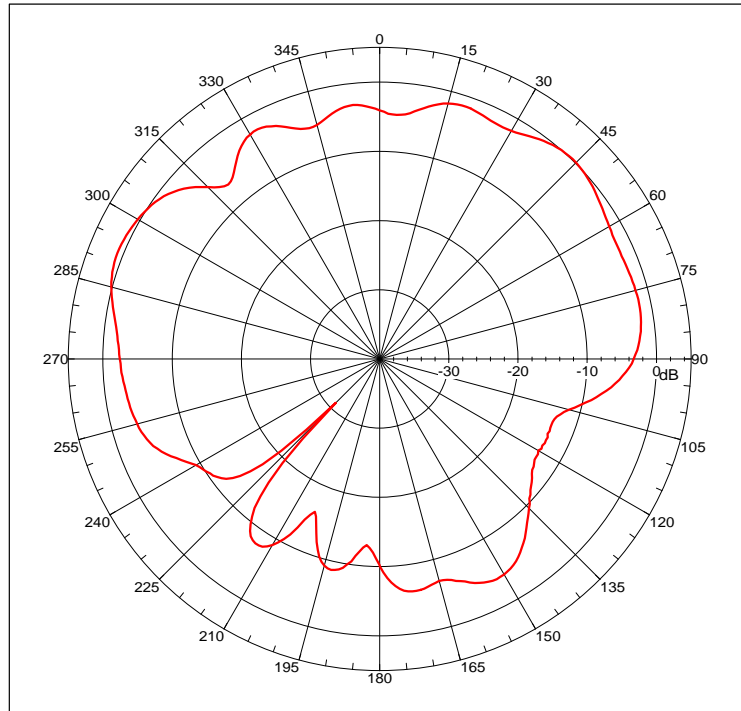
### 7.1 LEFT ANTENNA - RETURN LOSS



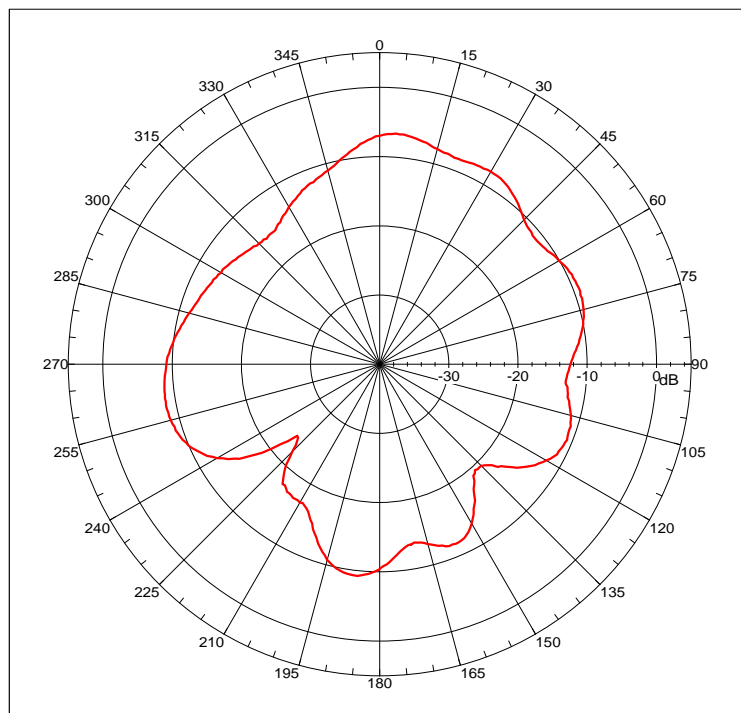
### 7.2 LEFT ANTENNA - VSWR



**7.3 LEFT ANTENNA - RADIATION PATTERN FOR XY PLANE:2.45GHZ**  
**Web Pad Attitude : Flat**  
**H- Polarization**



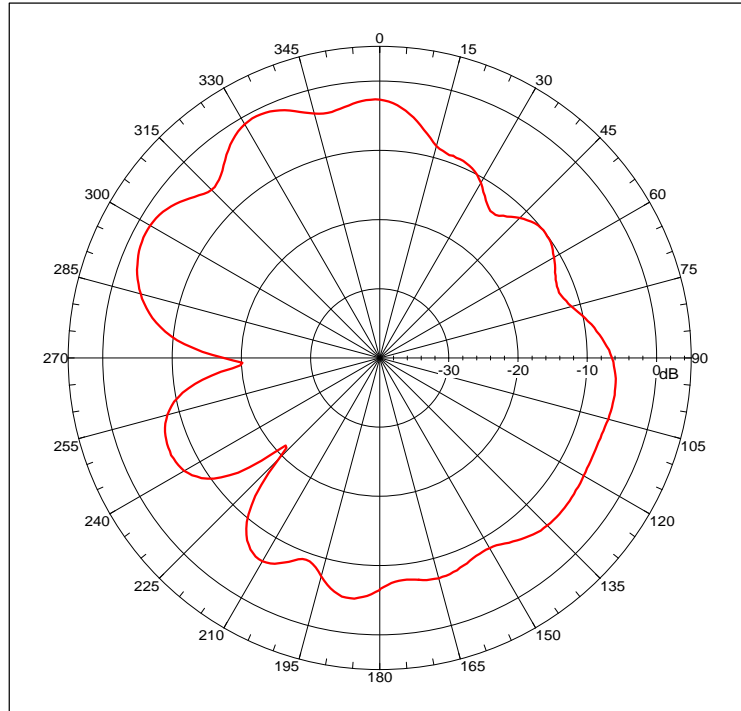
**V- Polarization**



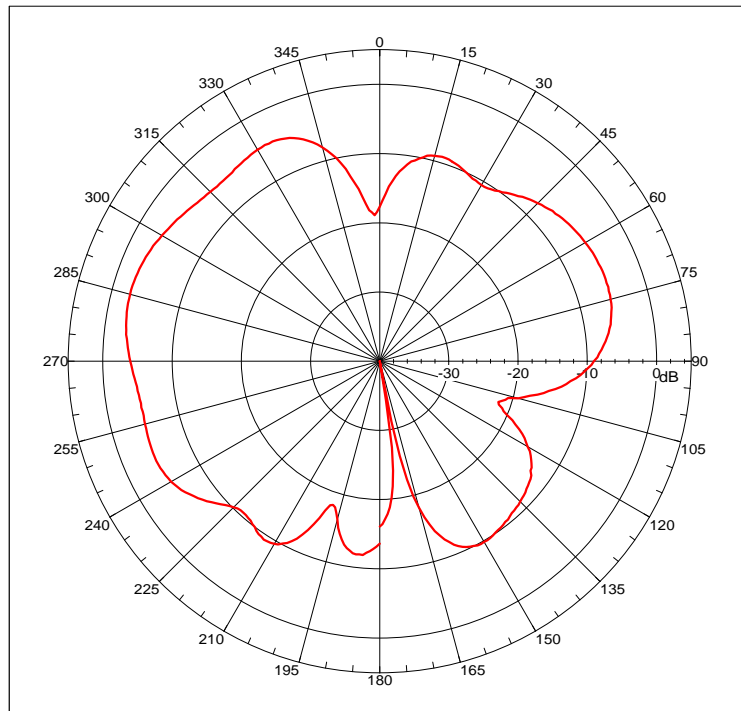
**LEFT ANTENNA - RADIATION PATTERN FOR XY PLANE:2.45GHZ**

**Web Pad Attitude : Tilt**

**H- Polarization**



**V- Polarization**



**7.4 LEFT ANTENNA - PEAK GAIN AND AVERAGE GAIN**

**Web Pad Attitude : Flat**

<b>XY Plane : LEFT</b>		
<b>Polarization</b>		<b>2.45GHz</b>
<b>H</b>	<b>Peak</b>	0.84
	<b>Average</b>	-3.75
<b>V</b>	<b>Peak</b>	-6.62
	<b>Average</b>	-11.03

**Web Pad Attitude : Tilt**

<b>XY Plane : LEFT</b>		
<b>Polarization</b>		<b>2.45GHz</b>
<b>H</b>	<b>Peak</b>	-0.81
	<b>Average</b>	--6.09
<b>V</b>	<b>Peak</b>	-2.67
	<b>Average</b>	-7.44